AN ARCHAEOLOGICAL SURVEY OF A PROPOSED BORROW PIT IN ANDERSON COUNTY, TEXAS

by

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AN ARCHAEOLOGICAL SURVEY OF A PROPOSED BORROW PIT IN ANDERSON COUNTY, TEXAS

Brazos Valley Research Associates
Project Number BVRA 03-27

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ABSTRACT

An archaeological survey of a 15 acre borrow pit in a floodplain setting adjacent to the Trinity River in northern Anderson County was conducted by Brazos Valley Research Associates in September 2003. Six trackhoe trenches were dug through clay and sand to a maximum depth of fourteen feet. No evidence of a prehistoric site was found within the area investigated. Copies of the report are on file at the Texas Historical Commission, Archeology Division; the Texas Archeological Research Laboratory on the campus of The University of Texas at Austin, and Brazos Valley Research Associates.

ACKNOWLEDGMENTS

I would like to thank those whose cooperation made the completion of this project possible. At W. W. Webber, Inc. in Corsicana, Texas maps and logistical support were provided by Bryan Donaldson, Johnny Williams, and Tommy Walter. William DeChaume was on site to show the Principal Investigator where to dig, and John Fennell operated the trackhoe. Barbara Hickham, Staff Archeologist at the Texas Department of Transportation (TxDOT), is the TxDOT reviewer for this project which was also reviewed by Mark H. Denton at the Texas Historical Commission, Archeology Division. Brandy Tankersly served as the contact person for TxDOT, Bryan District. Allegra Azulay, Records File Search Assistant at the Texas Archeological Research Laboratory (TARL), checked the site files for previously recorded sites in the project area and vicinity. The figures in this report were prepared by Lili Lyddon of LL Technical Services in North Zulch, Texas and Edward P. Baxter.

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INTRODUCTION

The State of Texas plans to improve State Highway 281 by raising it above the existing grade to avoid flooding. The fill to be used in the project will be taken from a 15 acre borrow pit in the floodplain of the Trinity River in northern Anderson County, Texas (Figure 1). The borrow pit will be excavated through clay and sandy clay to a depth of 10 feet. Topographic coverage is provided by the United States Geological Service (USGS) 7.5' quadrangle, Roustabout Camp dated 1960 and photorevised 1982 (map number 3196-444) (Figure 2). Since this project is on private property a permit from the Texas Historical Commission, Archeology Division, was not required.

Anderson County is located in a part of Texas that contains numerous prehistoric and historic sites, many of which have been considered to possess significant research potential. This county is in the area once inhabited by the prehistoric Caddo Indians of Northeast Texas. Many of these sites contain burials and pottery vessels of exceptional quality. Vandalism of archaeological sites in this area is a serious problem and the number of intact Caddoan sites is rapidly decreasing. The project area, however, is in a floodplain setting of the Trinity River. Buried sites have been found in similar settings in the general area; therefore, TxDOT requested the borrow pit be examined by a professional archaeologist prior to removal of fill. In order to comply with this requirement, W.W. Weber, Inc. contracted with Brazos Valley Research Associates (BVRA) of Bryan, Texas to evaluate the proposed borrow pit area. The project number assigned by Brazos Valley Research Associates is BVRA 03-27. Other permits relating to this project are a United States Army Corps of Engineers (COE) Nationwide Permit Number 23, and 195500272, an internal tracking number used by the COE. This project is within three TxDOT districts, and each as a CSJ number. The number for the Bryan District is CSJ 012203025.

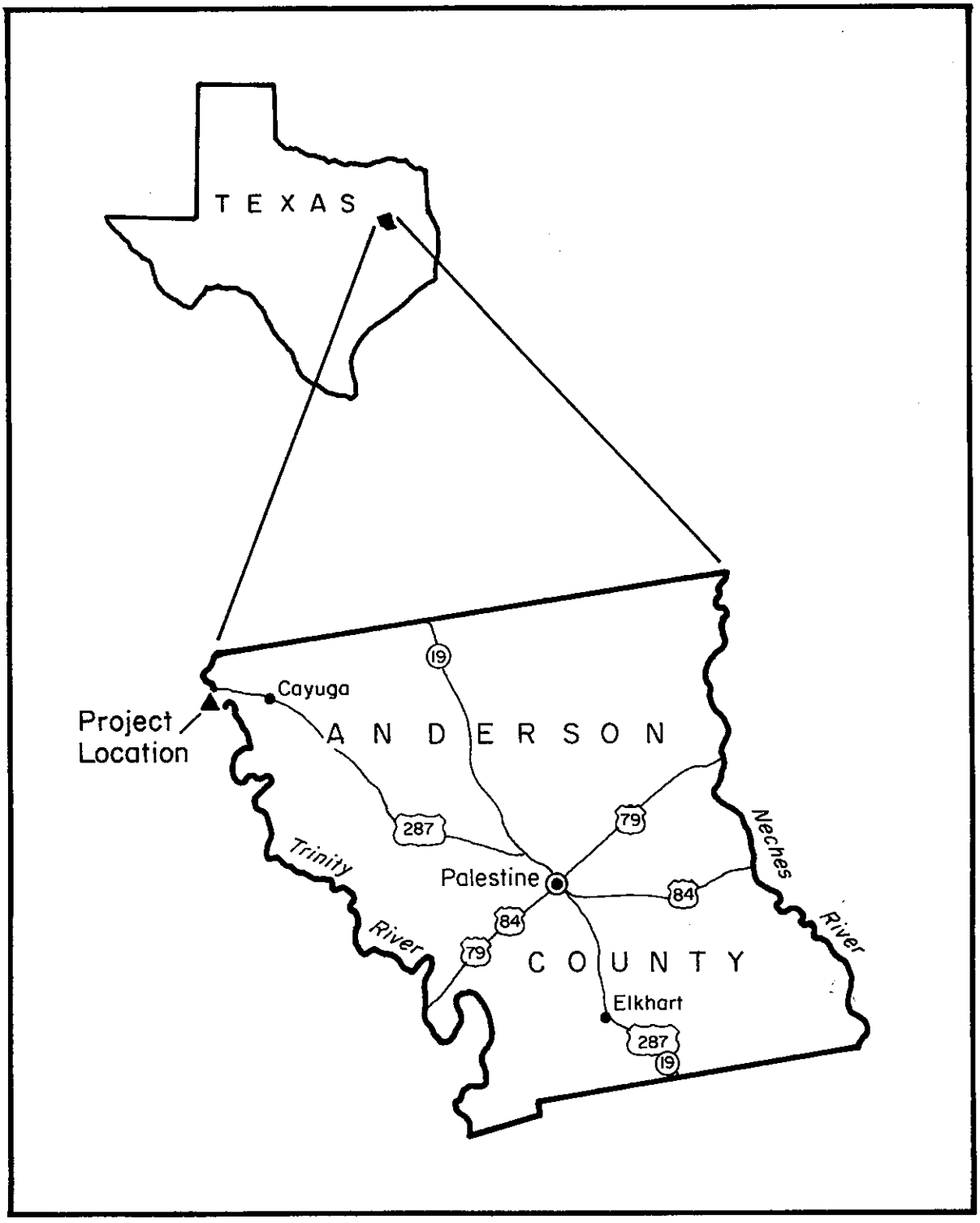

Figure 1. General Location Map.

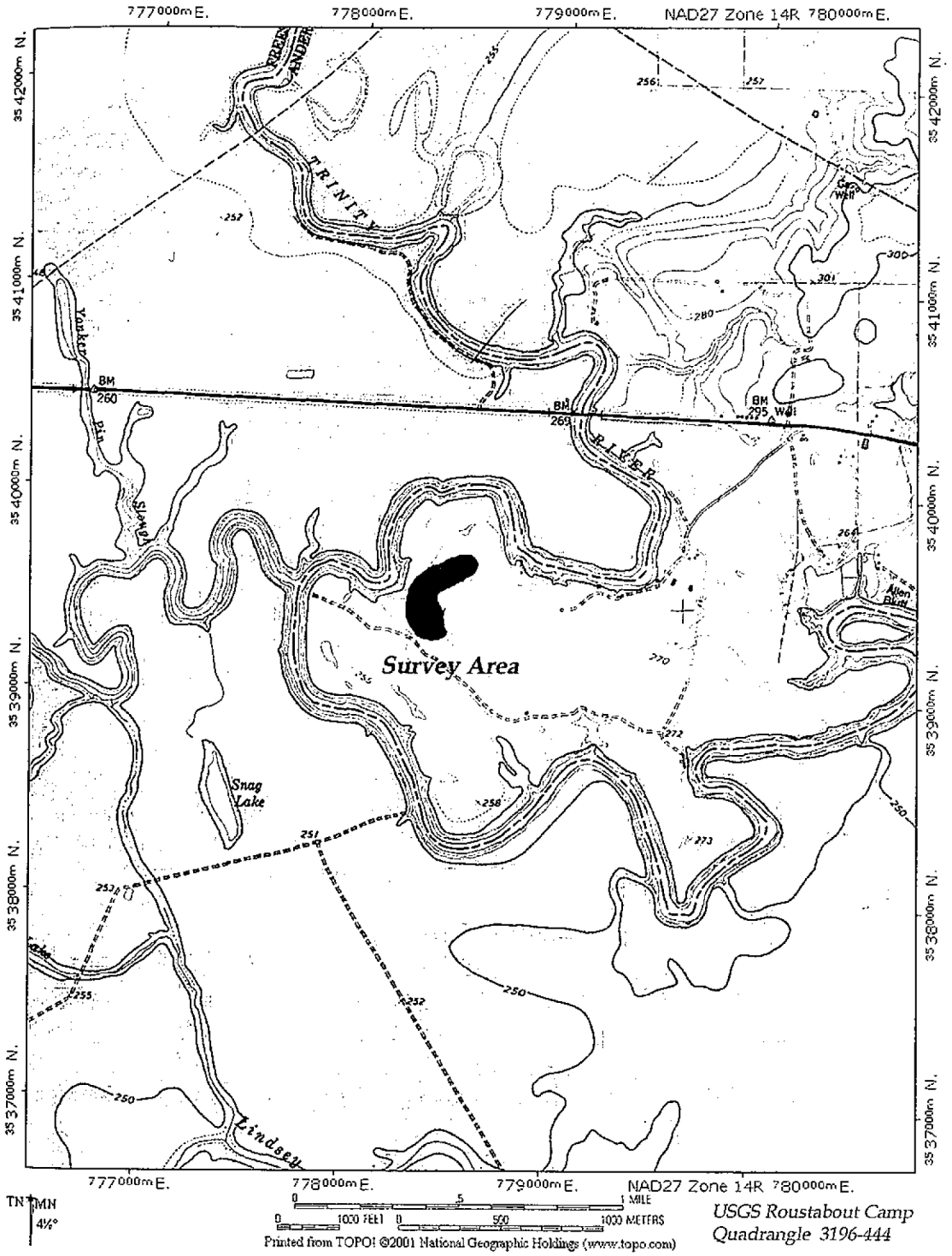

Figure 2. Project Area Depicted on Topographic Map.

ARCHAEOLOGICAL BACKGROUND

General

Anderson County is located in the Northeast Texas Archeological Study Region of the Eastern Planning Region as defined by the Department of Antiquities Protection in *Archeology in the Eastern Planning Region, Texas: A Planning Document* (Kenmotsu and Perttula 1993). According to the planning document, there were 121 sites recorded in the county as of 1991 (Kenmotsu and Perttula 1993:41). In the region, Anderson County was 16th in terms of numbers of sites recorded. Of the 121 recorded sites, 12 were considered not significant, 41 were of unknown significance, 46 were probably significant, and 22 were significant. Two sites (41AN19 and 41AN51) are listed on the National Register of Historic Places. The total number of sites, both prehistoric and historic, as of September 8, 2003, was 164 (Allegra Azulay, personal communication, September 10, 2003).

The *Archeological Bibliography for the Northeastern Region of Texas* (Martin 1990) cites 50 references for the county. Although many of these investigations have been small area surveys, often resulting in negative findings, several major reservoir projects have been conducted. These are the Blackburn Crossing Reservoir (Johnson 1958, 1961), Palestine Reservoir (Anderson et al. 1974), Tennessee Colony Lake (Richner 1977, 1982; Richner and Lee 1976, 1977), Trinity River Basin (Richner and Bagot 1978), and the Trinity River Multiple Use Project (Sorrow 1973). Overviews of the area include works by (Lynott and Richner 1977), Woodall (1972), and Story, et al. (1990).

Prehistoric occupations in the region cover all time periods from Paleoindian through Historic Caddoan, circa 9500 B.C. - A.D. 1860 (Kenmotsu and Perttula 1993:44). The reader is referred to this comprehensive and well organized document for additional information regarding the archaeological background for Anderson County and vicinity.

Previous Investigations

Two previous investigations are especially relevant to this study. The first is a bison procurement site in Navarro County situated in heavy clay fourteen feet below the surface. It was investigated in 1997 by Brazos Valley Research Associates (Moore et al. 1997). Flakes, biface fragments, and two Late Prehistoric arrow points were found associated with the bison bone.

In 1976 and 1977, a reconnaissance survey of the Trinity River Basin was performed by archaeologists from Southern Methodist University (Richard and Bagot 1978). This was a sampling survey designed to identify types of sites present along the 550 mile course of the Trinity River. In all, 169 prehistoric sites were recorded. There are four sites located within the bend of the river near the current project area.

Three of the four sites (41AN75, 41AN82, and 41AN120) recorded near the project area are prehistoric and classified as shell lenses. Each of these sites was found in a heavy black clay in the exposed river bank profile. No in-depth investigation was conducted; therefore, little is known about the sites except what was noted during the brief inspection. The fourth site (41AN76) is a 20th century house.

METHODS

Prior to entering the field a check of the site records at TARL was conducted in order to identify previously recorded sites in the project area and vicinity and relevant contract reports documenting work in the area were reviewed. In addition, the soil survey for Anderson County was perused (Coffee 1975). According to this source, there are four soil series that occur within or immediately adjacent to the project area (Figure 3). These are Axtell fine sandy loam, 0 to 3 percent slopes (AtB), Axtell fine sandy loam, 2 to 5 percent slopes (AtC2), Ferris clay, 5 to 8 percent slopes (FcD2), and Trinity clay (Tr). AtB soils are found on inter stream divides in areas mostly 5 to 50 acres in size. A typical profile is a fine sandy loam to 6 inches. From 6 to 12 inches is a yellowish-red clay. From 12 to 20 inches is a distinctly and coarsely mottled red and pale-yellow clay. Various clays extend to 82 inches (Coffee 1975:8). AtC2 soils are found on ridges and sides of drainages. Much of the surface area has been eroded, and in spots it has been removed. Gullies and rills are common. The surface layer is a pale-brown, medium acid fine sandy loam about 5 inches thick. The subsoil is a yellowish-red clay that extends to a depth of 30 inches. Clays continue to a depth of at least 60 inches (Coffee 1975:9). FcD2 soils are found in oblong to long and narrow areas that are 8 to 80 acres in size. Slopes are convex and near 6 percent in most places. Gullies are common in all areas, and much of the topsoil has been eroded. A typical profile contains various clays from the surface to at least 60 inches (Coffee 1975:17). Tr soils are found in areas 30 acres to several thousand acres in size. The soil is usually covered by shallow, slow-moving floodwater at least once each year except where it is protected by levees, but flooding lasts only a short time. Various clays extend from the surface to at least 80 inches.

Field Investigation

The field investigation was conducted on September 9, 2003 by Edward P. Baxter (Project Archaeologist). The 15 acre tract was examined utilizing a trackhoe to search for deeply buried sites in the alluvial floodplain of the Trinity River. In all, six trackhoe trenches were excavated. The trenches were dug to a maximum depth of 14 feet. The depth of each trench exceeded the ten foot Area of Potential Effect as planned by the client. The proposed borrow pit was not marked in the field, but a Mr. William DeChaume of W. W. Webber, Inc. was present to show the Project Archaeologist the site of the proposed borrow pit. The six trenches were excavated using a Komatsu PC 400LC trackhoe with a foot wide bucket operated by John Fennell. The trenches varied in size from 30 to 40 feet in length and 12 to 14 feet in depth. A hand held Garmin Map 76 GPS was used to mark the position of each trench for later plotting on the topographic map (Figure 4). Field notes documenting the size and depth of the trackhoe trenches are part of the project notes that were transferred to a log for publication in this report (Appendix I). A digital camera was used to document the field survey.

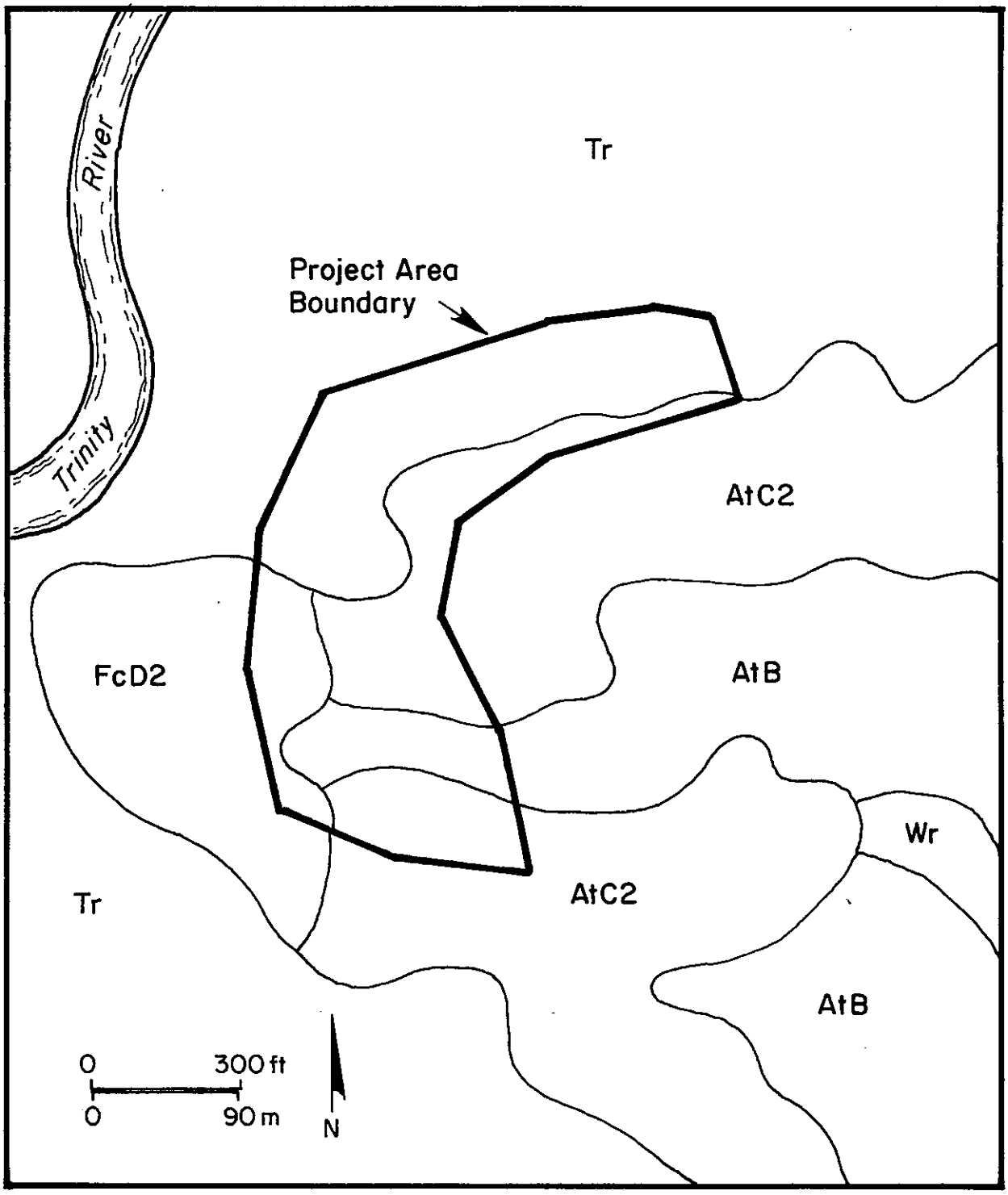

Figure 3. Project Area Depicting Soil Types Present.

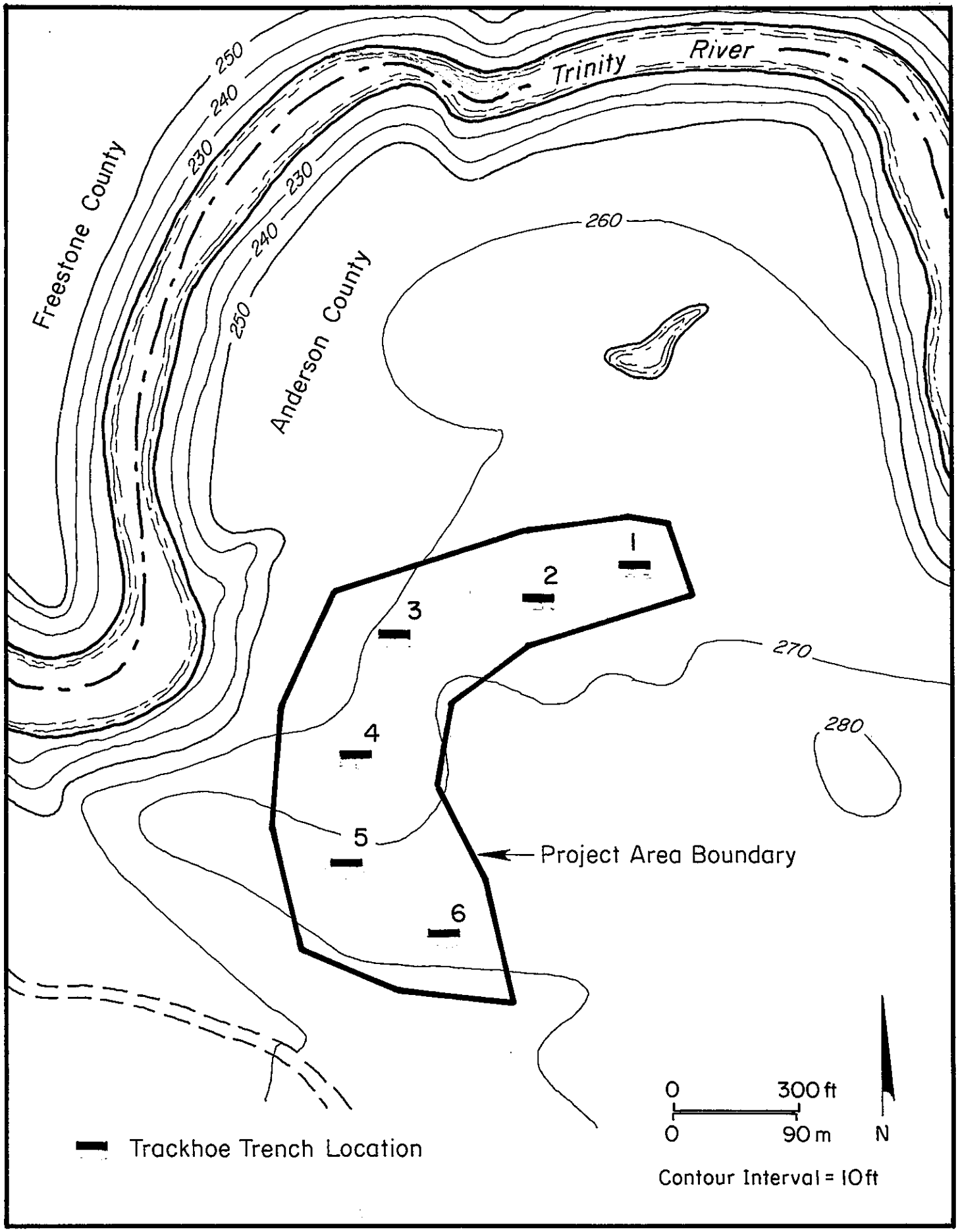

Figure 4. Location of Trackhoe Trenches

RESULTS AND RECOMMENDATIONS

The TARL records check revealed no archaeological sites within the boundaries of the current project area. Several sites were noted as being along the Trinity River in the general area. Very little information regarding these sites is available. No artifacts, burned rock, shell, or other indication of prehistoric activity were observed on the surface or in any of the six trenches. At the time of this survey the entire project area was in pasture. It is recommended that W. W. Webber, Inc. be allowed to proceed with construction as planned with no additional work by a professional archaeologist provided they remain within the footprint the borrow pit as currently defined. If the site is moved to another location or additional land is required BVRA recommends that this new area be subjected to archaeological survey, especially if the new area is closer to the river.

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Appendix I: Trackhoe Trench Log

Trench 1

40 feet long x 12 feet deep

Surface - 2 feet: light brown clay loam
2-6 feet: heavy black clay
6-9 feet: tan/gray clay mixed with smooth, rounded river gravels
9-10 feet: sandstone
10-12 feet: packed light gray dry fine sand

Trench 2

33 feet long x 12 feet deep

Surface - 2 feet: light brown clay loam
2-7 feet: heavy black clay
7-12 feet: tan sand mixed with clay and sandstone

Trench 3

30 feet long x 13 feet deep

Surface - 1 foot: light brown clay loam
1-3 feet: hard orange sandy clay
3-7 feet: layered sand and clay mix with strong lamelle layers
7-12 feet: coarse white river sand

Trench 4

30 feet long x 14 feet deep

Surface - 1 foot: light brown clay loam
1-5 feet: heavy black clay
5-11 feet: tan sand mixed with gray clay
11-14 feet: light brown coarse sand

Trench 5

40 feet long x 13 feet deep

Surface - 1 foot: light brown clay loam
1-3 feet: heavy black clay
3-8 feet: tan sand mixed with gray clay
8-13 feet: fine-grained white sand

Trench 6

30 feet long x 12 feet deep

Surface - 1 foot: light brown clay loam
1-7 feet: tan sand mixed with gray clay
7-12 feet: light brown sand mixed with orange clay